



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0617; Project Identifier MCAI-2020-00391-E; Amendment 39-21170; AD 2020-15-07]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG (Type Certificate formerly held by Rolls-Royce plc) Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Rolls-Royce Deutschland Ltd & Co KG RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36 and RB211-524H-T-36 model turbofan engines. This AD requires replacement of the low-pressure turbine (LPT) stage 1 disk before it reaches its new Declared Safe Cycle Limit (DSCL) or within 25 flight cycles after the effective date of this AD, whichever occurs later. This AD was prompted by a determination by the manufacturer that the affected LPT stage 1 disks cannot operate until their former published life limit. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, 15827, Blankenfelde-Mahlow, Germany; phone: +49 (0) 33 708 6 0; website: <https://www.rolls-royce.com/contact-us.aspx>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0617.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0617; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness

information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Kenneth Steeves, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7765; fax: 781-238-7199; email: kenneth.steeves@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No, 2020-0059, dated March 17, 2020 (referred to after this as “the MCAI”), to address an unsafe condition for the specified products. The MCAI states:

A review of operational flight data revealed that some RB211-524 engines may have been operated beyond the currently valid datum flight profile (FP) published in the applicable Aircraft Maintenance Manuals. The purpose of the datum FPs is to establish the operational limits (life limits) within which the corresponding critical parts are allowed to remain installed. In addition, as this FP exceedance was investigated, it was realised that the current life limits of certain P/N corresponding to reworked LPT Stage 1 discs (time since new, or since entry into service following rework) could no longer be supported.

This condition, if not corrected, could lead to disc failure, possibly resulting in engine in-flight shut-down and high energy debris release, with consequent damage to, and reduced control of, the aeroplane.

Prompted by these findings, Rolls-Royce published worldwide (WW) communication, reference WW11575-1, which identified certain parts, some of which were believed to have exceeded their respective safe cyclic life, to collect information in relation to the history of affected parts and to inform current operators and owners of the affected parts of an imminent life reduction. Rolls-Royce also published the NMSB, providing instructions for timely removal from service of the affected parts.

For the reasons described above, this AD requires removal from service of the affected parts. This AD also prohibits (re)installation of affected parts that have exceeded the new reduced limits.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0617.

Related Service Information under 1 CFR Part 51

The FAA reviewed Rolls-Royce plc Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AK422, Revision 1, dated March 2, 2020. The NMSB describes procedures for reducing the Declared Safe Cyclic Limit for LPT stage 1 disks. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by EASA and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD because it evaluated all the relevant

information provided by EASA and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires replacement of the LPT stage 1 disk before it reaches its new DSCL or within 25 flight cycles after the effective date of this AD, whichever occurs later.

FAA's Justification and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for "good cause," finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under this section, an agency, upon finding good cause, may issue a final rule without seeking comment prior to the rulemaking. Similarly, Section 553(d) of the APA authorizes agencies to make rules effective in less than 30 days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule. The manufacturer's review of operational flight data revealed that certain RB211-524 model turbofan engines may have been operated beyond the current valid datum flight profile (FP) published in the Aircraft Maintenance Manuals. The purpose of the datum FP is to establish the operational limits (life limits) within which the corresponding critical parts are allowed to remain installed. The investigation of this exceedance determined that the current published life limits established for the LPT stage 1 disk could no longer be supported for certain part and serial numbered LPT stage 1 disks that have undergone rework. The manufacturer has calculated a new DSCL for these disks. Exceeding the DSCL for these disks could lead to failure of the disk, in-flight shut down of the engine and high-energy release of debris from the engine, resulting in

damage to the engine and to the airplane. Consequently, these disks require replacement within 25 flight cycles or before reaching their new life limit, whichever occurs later.

The FAA considers the removal of these LPT stage 1 disks from service to be an urgent safety issue. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the reasons stated above, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2020-0617 and Project Identifier MCAI-2020-00391-E at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this final rule contain commercial or financial information that is

customarily treated as private, that you actually treat as private, and that is relevant or responsive to this final rule, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this final rule. Submissions containing CBI should be sent to Kenneth Steeves, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 22 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Remove and replace LPT stage 1 disk	120 work-hours x \$85 per hour = \$10,200	\$30,000	\$40,200	\$884,400

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2020-15-07 Rolls-Royce Deutschland Ltd & Co KG (Type Certificate formerly held by Rolls-Royce plc): Amendment 39-21170; Docket No. FAA-2020-0617; Project Identifier MCAI-2020-00391-E.

(a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rolls-Royce Deutschland Ltd & Co KG (type certificate formerly held by Rolls-Royce plc) RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36 and RB211-524H-T-36 model turbofan engines with low-pressure turbine (LPT) stage 1 disks, part number (P/N) UL37606, UL37607, UL37608, UL37722 or UL37790, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by a determination by the manufacturer that the current published life limits established for certain part and serial numbered LPT stage 1 disks that have undergone rework could no longer be supported. The FAA is issuing this AD to prevent failure of the LPT stage 1 disk. The unsafe condition, if not addressed, could result in uncontained release of high-energy debris from the engine, in-flight shutdown of the engine, damage to the engine, and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Before the LPT stage 1 disk reaches its Declared Safe Cycle Limit (DSCL) as specified in the Accomplishment Instructions, Paragraph 3., Tables 1 through 9, in Rolls-Royce plc Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AK422, Revision 1, dated March 2, 2020, or within 25 flight cycles after the effective date of this AD, whichever occurs later, remove the LPT stage 1 disk from service and replace with a part eligible for installation.

(h) Definition

For the purpose of this AD, a part eligible for installation is any LPT stage 1 disk that is new or has not reached its DSCL as specified in the Accomplishment Instructions, Paragraph 3., Tables 1 through 9, in the Rolls-Royce Alert NMSB RB.211-72-AK422, Revision 1, dated March 2, 2020.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Kenneth Steeves, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7765; fax: 781-238-7199; email: kenneth.steeves@faa.gov.

(2) Refer to European Union Aviation Safety Agency AD No. 2020-0059, dated March 17, 2020, for more information. You may examine the EASA AD in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2020-0617.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Rolls-Royce plc Alert Non-Modification Service Bulletin RB.211-72-AK422, Revision 1, dated March 2, 2020.

(ii) [Reserved]

(3) For Rolls-Royce plc service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, 15827, Blankenfelde-Mahlow, Germany; phone: +49 (0) 33 708 6 0; website: <https://www.rolls-royce.com/contact-us.aspx>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, email: fedreg.legal@nara.gov, or go to:
<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on July 10, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-15563 Filed: 7/17/2020 8:45 am; Publication Date: 7/20/2020]